トト A-71760/AJT/TJH 463031-139

KTIFICATE OF MAILING (37 CFR 1.8(a))

I hereby certify that this correspondence (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on May 14, 2004.

Signature

Laura Lee Mosier

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

LAZAREV et al.

Serial No.

10/656,578

Filed:

September 4, 2003

For: Organic Photosensitive Optoelectronic

Device

Art Unit:

1772

Examiner:

To be assigned

Date:

May 14, 2004

## INFORMATION DISCLOSURE STATEMENT SUBMITTED PRIOR TO THE FIRST OFFICIAL ACTION

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

In satisfaction of the duty of disclosure under 37 C.F.R. § 1.56, and in accordance with the provisions of 37 C.F.R. §§ 1.97 and 1.98, Applicants wish to draw the attention of the U.S. Patent and Trademark Office to the references cited on the accompanying form PTO/SB/08A-08B. In accordance with 1273 Off. Gaz. Pat. Off. 1, 8/5/2003, no copies of U.S. patents and U.S. published applications are enclosed. Further, in accordance with the provisions of 37 C.F.R. § 1.98(b)(5)(c), Applicant submits that reference no. C17 is substantively cumulative, in which a copy of the publication is not submitted, and that this publication is considered cumulative. Copies of all other references are enclosed.

None of the foregoing references is believed to disclose the invention as claimed.

Nothing herein shall constitute an admission concerning the contents of any of the cited references, nor shall the inclusion of a reference herein be considered an admission that the

A-71760/AJT/TJH 463031-139

reference constitutes prior art against the invention claimed in the above-identified application.

Submission of the present document shall not be construed as an admission that a search has

been made or that better art does not exist.

As far as is known to the undersigned, this Information Disclosure Statement is being

filed within three months of the filing date of a national application, within three months of the

date of entry of the national state in an international application, or before the mailing date of a

first Office Action on the merits as set forth in 37 C.F.R. § 1.97(b), and therefore no fee is

required.

While no fee is believed to be due, if this belief is in error the Commissioner is

authorized to charge any additional fees, including extension fees or other relief which may be

required, or credit any overpayment to Deposit Account No. 50-2319 (Our Order No. 463031-

139 [A-71760/AJT/TJH]).

Please direct any calls in connection with this application to the undersigned at

(650) 494-8700.

Respectfully submitted,

DORSEY/ & WHITNEY LLP

Tianjun Hou

Reg. No. 51,821

DORSEY & WHITNEY LLP

Suite 3400, Four Embarcadero Center

San Francisco, CA 94111-4187

Telephone: (650) 494-8700

Facsimile: (650) 494-8771

Customer Number: 32940

1071116

2

							Complete if Known								
INFORMATION DISCLOSURE							Application Number 10/656,578				78				
STATEMENT BY APPLICANT							Filing Date			September 4, 2003					
7 STA PENIENT BY APPLICANT								First Named Inventor			Pavel I. LAZAREV				
(use asymany sneets as necessary)								Group Art Unit			1772				
MAY 2 1 2004 E								Examiner Name			Not yet assigned				
Sheet	المراجعة الم			of			2	Attor	Attorney Docket Number		A-71760/AJT/TJH (463031-139)				
4.40	70, 70, 10						U.S. PATENT DOCUMENTS			rs		(,,,,,			*
Examiner Initials*	Cite No.	U.S. Patent Document				Name of Patentee				e of Publication of		Pages, Columns, Lines,			
		Normalisan		Kind Code <sup>2</sup>			of Cited D	Document		Cited Documen MM-DD-YYYY				Where Relevant Passages or Relevant	
		Number (if know										1 1	Figures Appear		••
	A1	5,739,2					GVON 6					8			
	A2	1				$\dashv$	KHAN			04-11-2000					
	AZ	6,049,4					- Allian			<del>1-11-2000</del>					
	<del>                                     </del>	<del> </del> -			+	+				1			_		
		ļ		-	+	+						-			
	<del> </del>	-			╁	-				<u> </u>					
					+										
					╄	$\dashv$				ļ					
					+-										
	<u> </u>	ļ			╀	-									
	ļ				+	_									
	ļ				╄										
	ļ				_										
					$oldsymbol{oldsymbol{\perp}}$	_									
	ļ				↓_										
					<u> </u>										
	1 .	<del>,</del>				F	OREIGN PATEN	T DOC	UME	NTS	T				
Examiner Initials*	Cite No.1	Foreign Patent Document					Name of P	atentee or Applicant Cited Document		licant	Date of Publication		ation	Pages, Columns,	
						of	nt Cited			Document		Lines, Where Relevant Passages or Relevant	Té		
		Kind Coo Office <sup>3</sup> Number <sup>4</sup> (if knov									MM-DI			ΥΥ	
														Figures Appear	
	ļ	ļ	ļ			ļ									
	<b> </b>					ļ									ļ
	<b> </b>	<u> </u>				<b> </b>					ļ				<u> </u>
	ļ					<u> </u>									<u> </u>
	<u> </u>														
	<u> </u>	ļ	ļ			<u> </u>					ļ				
															<u> </u>
						1								<u> </u>	
			1								1				
Examiner Signature	Τ	•	•						Dat Cor	te nsidered					

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English Language Translation is attached.

C17

C18

Examiner

Signature

(Not included)

No. 12, December 1972, pp. 5181-5189.

					Complete if Known								
INF	ORN	<b>MATIO</b>	N DIS	SCLOSURE	Application Number	10/656,578							
ST.	A TITE	MENT	DV A	PPLICANT	Filing Date	September 4, 2003							
517					First Named Inventor	Pavel I. LAZAREV							
	(use a	s many sh	ieets as	necessary)	Group Art Unit	1772							
					Examiner Name	Not yet assigned							
Sheet	2 of 2			2	Attorney Docket Number	A-71760/AJT/TJH (463031-139)							
			N	ON PATENT LITERA	TURE DOCUMENTS		T <sup>2</sup>						
Examiner Initials*	Cite No.1												
	Cl	ASHIDA, M., et al., "Thermal Transformation of Vacuum-Condensed Thin Films of Copper-Phthalocyanine", Journal of Crystal Growth, 1971, 8:45-56.											
	C2	ASHIDA, M., et al., "Unit Cell Metastable-form Constants of Various Phthatlocyanines", Bulletin of the Chemical Society of Japan, 1966, 39(12): 2616-2624.											
	C3	ASHIDA, M., "The Orientation Overgrowth of Metal-phthalocyanines on the Surface of Single Crystals. I. Vacuum-condensed Films on Muscovite", <i>Bulletin of the Chemical Society of Japan</i> , 1966, 39(12): pp. 2625-2631.											
	C4	ASHIDA, M., "The Orientation Overgrowth of Metal-phthalocyanines on the Surface of Single Crystals. II. Vaccuum-condensed Films of Copper-phthalocyanine on Alkali Halides", 1966, 39(12): 2632-2638.											
	C5	BOBROV, Y., "Spectral properties of Thin Crystal Film Polarizers", <i>Molecular Materials</i> , 2001, 14(3):191-203.											
	C6	DITTMER, "Photovoltaic Properties of MEH-PPV/PPEI Blend Devices", J.J., et al., Synthetic Metals, 1999, 102:879-880.											
	C7	FRYER, J.R., "Molecular Images of Thin-Film Polymorphs and Phase Transformations in Metal-Free Phthalocyanine", <i>Acta Cryst.</i> , 1979, A35, pp. 327-332.											
	C8	HIRAMOTO, M., et al., "Photocurrent multiplication in organic pigment films", Appl. Phys. Lett., 1994, 64(2): 187-189.											
	C9	LAZAREV, P., et al., "X-ray Diffraction by Large Area Organic Crystalline Nano-Films", Molecular Materials, 2001, 14(4): 303-311.											
	C10	McPHERSON, A., "Facilitation of the Growth of Protein Crystals by Heterogeneous/Epitaxial Nucleation", Journal of Crystal Growth, 1988, 85:206-214.											
	Cll	MURATA, Y. et al., "Molecular image of copper phthalocyanine", <i>Journal of Microscopy</i> , December 1976, Vol. 108, Pt., 3, pp. 261-275.											
	C12	NAZEERUDDIN, M.K., et al., "Conversion of Light to Electricity by <i>cis</i> -X <sub>2</sub> Bis(2,2'-bipyridyl-4,4'-dicarboxylate)ruthenium(II) Charge-Transfer Sensitizers (X=Cl <sup>-</sup> , Br <sup>-</sup> , l <sup>-</sup> , CN <sup>-</sup> , and SCN <sup>-</sup> ) on Nanocrystalline TiO <sub>2</sub> Electrodes", <i>J. Am.Chem. Soc.</i> , 1993, 115 (14): 6382-6390.											
	C13	PETRITSCH, K., Ph.D. Thesis, "Organic Solar Cell Architectures", Cambridge and Graz, July 2000, Chapters 3 and 4, Single Layer Devices, p. 31 and p. 67.											
	C14	SAIJO, H. et al., "Epitaxial Growth of a New Polymorph of Cu-Phthalocyanine on Graphile", Journal of Crystal Growth, 1977, 40: 118-124.											
	C15			al Growth Mechanism urf. Sci., 1985, 22/23, p	of Chlorinated Copper Phthop. 574-581.	alocyanine on KCI							
	C16	6 SAITO, Yoshio et al., "Molecular Energetics of the Epitaxial Growth of Chlorinated Copper Phthalocyanine on KCI surfaces", <i>Journal of Crystal Growth</i> , 1984, 67:91-96.											

SZE, S.M., *Physics of Semiconductor Devices*, Wiley-Interscience, New York, 1981.

UYEDA, N. et al., "Molecular image resolution in electron microscopy", J. App. Phys., Vol. 43,

Date

Considered